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DIRECT TESTIMONY OF

D. RUSSELL "RUSTY" HARRIS

ON BEHALF OF

DOMINION ENERGY SOUTH CAROLINA, INC.

DOCKET NO. 2021-236-G

Q. PLEASE STATE YOUR NAME AND BUSINESS ADDRESS.

A. My name is D. Russell "Rusty" Harris. My business address is 400 Otarre Parkway, Cayce, South Carolina 29033.

Q. BY WHOM ARE YOU EMPLOYED AND IN WHAT POSITION?

A. I am Vice President and General Manager of Gas Operations for Dominion Energy South Carolina, Inc. ("DESC" or the "Company") and Vice President and General Manager of Southern Distribution for Public Service Company of North Carolina, Inc., d/b/a/ Dominion Energy North Carolina ("PSNC").

Q. PLEASE DESCRIBE YOUR EDUCATIONAL AND BUSINESS BACKGROUND.

A. I graduated from Clemson University in 1986 with a Bachelor of Science in Electrical Engineering. In 1990, I received a Master of Business Administration from the University of South Carolina. From 1986 to 2003, I worked for South Carolina Electric & Gas Company ("SCE&G"), now DESC, in various roles in Electric Operations, including Vice President – Wires Operation from 1997-2003. In 2003, I became Vice President – Operations for PSNC and was promoted to President and Chief Operating Officer in January 2006. In 2012, I was named Senior Vice President of SCANA and in 2013, I was given additional management responsibilities over SCE&G's Gas Operations. I assumed

my current titles after SCANA merged with Dominion Energy, Inc. ("DEI") in January 2019.

Q. PLEASE DESCRIBE YOUR DUTIES AS VICE PRESIDENT AND GENERAL MANAGER OF GAS OPERATIONS FOR DESC.

A. I work with our corporate Gas Supply team on procurement decisions related to the commodity and pipeline transportation. Gas Supply's specific responsibilities include planning and procurement of gas supply and pipeline capacity, nominations and scheduling related to natural gas transportation and storage services on interstate pipelines, gas cost accounting, state and federal regulatory issues concerning supply and capacity, asset and risk management, and gas transportation administration. Gas Supply supports not only our Gas distribution business but DESC's power generation facilities as well.

Q. HAVE YOU PREVIOUSLY TESTIFIED BEFORE THE PUBLIC SERVICE COMMISSION OF SOUTH CAROLINA ("COMMISSION")?

A. Yes, I have testified before this Commission in prior years.

Q. WHAT IS THE PURPOSE OF YOUR TESTIMONY IN THIS PROCEEDING?

A. The purpose of my direct testimony is to provide an overview of Responsibly Sourced Gas ("RSG") and how RSG complements DESC's efforts to reduce emission of greenhouse gases ("GHG") across the natural gas value chain. I also explain the differences between RSG and Renewable Natural Gas ("RNG") and provide an overview of DESC's vision for integrating both RSG and RNG into its mix of fuel sources.

Q. WHAT IS RSG?

A. RSG is an emerging area of natural gas production that seeks to reduce emissions and adverse environmental impacts in order to produce a cleaner and more environmentally

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friendly product for consumer benefit. Specifically, RSG is geologic natural gas that has been certified to meet certain environmental performance criteria, such as the reduction of GHGs. Industry participants have also referred to RSG as Next Generation Natural Gas (NextGenGas), Certified Gas, and Differentiated Gas.

The RSG certification process allows natural gas producers to demonstrate to the market that they are serious about curtailing the environmental impacts of their operations and enhancing the transparency in their emissions reporting. RSG certification also allows the market to distinguish natural gas sourced through a superior environmental footprint from traditionally sourced natural gas.

Q. WHAT BENEFITS HAS DESC IDENTIFIED IN PROCURING RSG?

A. Natural gas is primarily composed of methane, a clean fuel that emits few air pollutants when burned in stove tops, in power plants to generate electricity, or to power vehicle engines. However, when methane is emitted directly into the atmosphere (and not burned), it is a potent greenhouse gas. By reducing methane emissions across the natural gas value chain, DESC will deliver more value to our customers while providing a significant and immediate impact on mitigating climate change.

Integrating RSG into DESC's fuel mix would allow the Company to participate in a collaborative, market-driven approach to reduce GHG emissions. Just as DEI has committed to Net Zero from the operations of its own gas distribution systems (Scope 1 emissions), utilizing RSG would represent a serious commitment to reduce upstream (Scope 3) emissions as well, and by extension, would represent lowering the methane intensity of the gas delivered to our customers.

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Q. COULD RSG LEAD TO COMPETITIVE ADVANTAGES FOR SOUTH CAROLINA?

A. Yes, it seems likely that there would be economic development advantages related to RSG based on DESC's understanding of the marketplace. Being at the forefront of adding RSG to the DESC fuel mix would put South Carolina at a competitive advantage over utilities in other states that have not added RSG. DEI has observed that customer emissions goals coupled with the overall societal demand to reduce GHG emissions have become the primary drivers for RSG demand across its corporate footprint and in other markets.

Q. WHAT EFFORTS HAS DESC TAKEN TO STUDY THE BENEFITS AND RISKS ASSOCIATED WITH RSG?

A. DEI has a corporate-wide goal of achieving Net Zero carbon and methane emissions reductions across its electric and gas businesses by 2050, which centers on its direct Scope 1 emission reductions. Given DEI's role in the natural gas value chain, DEI is also giving serious consideration to opportunities to reduce its Scope 3 emissions, including through natural gas supplier emissions reductions. RSG plays a vital role in that process. DESC is not an outlier in studying the addition of RSG to its fuel mix to achieve corporate goals. Rather, all of the utilities throughout DEI are actively working to gain knowledge of the benefits to customers, the environment, and the costs of RSG. This fact gathering approach is part of corporate-wide synergies to understand and add RSG to our utility systems in order to benefit our customers.

DESC through DEI is a member of the NextGenGas Coalition, which is an anti-trust compliant forum for companies that believe RSG is an important part of a lower-

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emissions future. DESC is also a member of the ONE Future Coalition. The ONE Future Coalition is a group of 50 natural gas companies working together to voluntarily reduce methane emissions across the natural gas value chain to 1% (or less) by 2025. NextGenGas Coalition and ONE Future are committed to voluntarily reducing methane emissions of the member companies.

As a member of the NextGenGas Coalition, DEI is committed to evaluating best practices to support the certification and procurement of RSG and putting forth a transparent process that allows for a comparison between differentiated gas offerings. Also, DEI's participation in the NextGenGas Coalition provides the Company with an educational forum to share best practices, experiences, and ongoing developments in the RSG marketplace. Moreover, NextGenGas Coalition seeks to develop common understanding of stringent certification standards that should be applicable in the industry. This is an emerging industry effort, and there is work to be done to develop a credible and accepted framework for defining and developing best practices to support the procurement of RSG. DESC participates in those efforts through its representatives on NextGenGas Coalition.

However, NextGenGas Coalition is not a standard setting body and does not have a role in the process for certifying natural gas as RSG. Independent entities conduct the testing of a natural gas supplier's extraction and production processes and issue certifications to those suppliers meeting or exceeding the emissions reductions necessary to achieve RSG status.

DESC also actively monitors the RSG marketplace and the evolution of this emerging market. DESC is reviewing and developing more knowledge of the certification

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processes employed by the independent third-party certification groups, is comparing RSG pricing with that of traditionally sourced natural gas, and is reviewing real-time data of the benefits of emission reductions resulting from RSG sourcing.

Q. WHY DOES DESC CONSIDER IT BENEFICIAL TO EVALUATE ADDING RSG TO ITS GAS SUPPLY?

A. DEI voluntarily developed and committed to achieving net zero carbon and methane emissions from its operations by 2050. The majority of its peer companies have made similar commitments. Customers, investors, the energy marketplace, and other stakeholders are increasingly demanding decarbonization by energy companies.

Beyond commitments related to direct emissions, there is increasing momentum for local gas distribution companies and electric power generators to extend their focus to their upstream and downstream (Scope 3) emissions. Therefore, DESC has an important role to purchase natural gas with lower carbon and methane emissions, supports the sustainability of energy supply for our customers, and has the ability to meet our customers' and other stakeholders' expectations regarding emission reduction goals.

While regulation can and should play a role in supporting clean energy policies across the economy and here in South Carolina, DESC believes there is also an important role for industry and market-driven efforts to make progress effectively and efficiently toward decarbonization in a cost-effective manner for our customers. DESC is actively engaging in the RSG marketplace. As additional data becomes available to DESC on sourcing and procuring RSG, that information can inform future purchases.

Natural gas will continue to play a key role in the energy mix for years to come for DESC as it seeks to achieve emission reductions throughout the natural gas value chain.

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Emission reductions require incremental advancements throughout the supply chain, including those for the upstream suppliers of natural gas. Improving the environmental footprint of natural gas will be a critical component in achieving a decarbonized energy future. RSG offers an efficient, proactive, market-based approach for benefits toward achieving these goals.

Q. **IS PROCURING RSG THE ONLY WAY THAT DESC PLANS TO MEET CLIMATE EMISSION GOALS?**

A. No. DESC sees RSG as one of several tools that it is available to meet its climate emission goals. As detailed in DEI's 2021 Climate Report, DEI and its subsidiaries are committed to a holistic approach to reducing GHG emissions. DEI seeks to reduce its GHG emissions from all sources—including its indirect emissions from upstream and downstream sources not owned or controlled by DEI or its subsidiaries. These emissions (termed as Scope 3 emissions) are emissions that are released into the atmosphere as a result of suppliers providing natural gas supply or transportation of that supply to DEI's utility systems, including DESC. Thus, the benefits of procuring RSG instead of traditionally sourced natural gas are two-fold: Procuring RSG would allow DESC to provide its customers with a cost-effective and environmentally conscious fuel source while also reducing Scope 3 emissions.

DESC believes in the procurement of RSG in conjunction with the procurement of other environmentally conscious energy sources for the benefit of our customers. DESC is evaluating the integration of both RSG and RNG into its system as those concepts mature. RSG and RNG will provide tangible benefit to customers in a reasonable and prudent way. Using this two-pronged approach will reduce DESC's Scope 1 and Scope 3

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emissions while adding diversity to the Company's fuel mix. The integration of both RSG and RNG would yield optimal environmental benefits and cost efficiency for South Carolina's ratepayers, while also contributing to DESC's overall emission reduction efforts.

Q. WHAT IS RNG AND HOW DOES IT DIFFER FROM RSG?

A. As I mentioned, RSG is the sourcing of geologic natural gas that has been certified to meet certain environmental performance criteria. RNG, however, is a sustainable alternative fuel created by capturing methane from existing waste streams (e.g., landfills, farms, etc.) and redirecting it away from the environment. Capturing methane and converting it to renewable natural gas substantially reduces greenhouse-gas emissions from agriculture, which accounts for 10% of U.S. greenhouse-gas emissions. Because methane is a substantially more potent greenhouse gas than carbon dioxide, the RNG process removes more greenhouse-gas potential from the atmosphere than is created at the customer's burner tip. Depending upon its source, RNG can be considered carbon-neutral or carbon-negative.

Q. IF RNG IS A CARBON-NEUTRAL FUEL SOURCE, WHY THE NEED FOR RSG?

A. RNG is currently the most emission friendly form of natural gas. But—like most utilities—DESC's integration of RNG as a fuel source remains in a nascent state due to the limited availability of RNG in the natural gas marketplace. The availability of RNG is limited due to the scarcity of these resources being developed and the amount of natural gas that is produced by these resources and connected natural gas pipelines and utility systems. However, new RNG resources are being developed and connected currently and over time we expect RNG to be more available for our customers. For example, Dominion

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Energy has formed partnerships with swine and dairy farmers to capture methane emissions from animal waste that would otherwise escape into the atmosphere and process the captured natural gas for use by our customers.

DESC plans to assess the various technologies, markets, and opportunities to expand and develop RNG availability for its customers. Thus, as it stands today, procuring RSG would provide the Company with an immediate and readily available opportunity to reduce its GHG emissions at a lower incremental cost than other decarbonization options. And—most importantly for our customers—integration of RSG allows DESC to lower its emissions without modifying its existing natural gas infrastructure. In other words, procuring RSG would reduce DESC's GHG emissions in an affordable and efficient manner.

Q. SHOULD DESC BE REQUIRED TO CHOOSE RSG OR RNG?

A. No, both should be utilized as part of DESC's diversified fuel portfolio. RSG offers the immediate path for tangible and beneficial Scope 3 emissions reductions related to natural gas purchases and supply. As the RNG market matures it will provide the opportunity to reduce Scope 1 and Scope 3 emissions to enhance the benefits already captured by RSG sourcing. RSG and RNG work in tandem to help DESC and its customers achieve environmental goals and emission reductions. The duo of immediate RSG benefits coupled with future RNG reductions will benefit customers in both the short and long term.

That is because RSG and RNG are complementary fuel sources. While DESC is still determining the mechanics of how it can integrate both RSG and RNG into its system, the Company believes that—eventually—the simultaneous use of both gases will provide DESC and its customers with a cost-effective path towards reducing their GHG footprint.

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Q. ARE THERE ANY OTHER OPPORTUNITIES TO GATHER MORE INFORMATION REGARDING CUSTOMER DEMAND FOR RSG?

A. Yes, the RSG market continues to evolve, mature, and improve. Therefore, DESC will continue to monitor the RSG market to find the best value for customers resulting from future procurement of RSG.

Q. IS THE COMPANY REQUESTING THAT THE COMMISSION TAKE ANY ACTION IN THIS DOCKET?

A. No, the Company is not requesting that the Commission take any action in this docket at this time. The Company appreciates the opportunity to provide information on RSG and hopes the information has been helpful to the Commission's understanding of RSG. The Company looks forward to continued dialogue with the Commission on this beneficial fuel source.

Q. DOES THIS CONCLUDE YOUR DIRECT TESTIMONY?

A. Yes.

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